

DEDASHEV, Ya. P.

DEDASHEV, Ya. P. -- "Conditioned Reflex Influences on the Motor Activity of the Reticulum and Rumens in Sheep." Min Higher Education USSR, Kazan' Veterinary Inst imeni N. E. Bauman, Kazan', 1955\*(Dissertation for the Degree of Candidate in Sciences)

SO: Knizhnaya letopis', No. 37, 3 September 1955

\*For the Degree of Candidate in Biological Sciences

DEDASHEV, Ya.P.

Conditioned responses to motor activity of the reticulum and  
rumen in sheep. Fiziol.zhur. 45 no.4:483-486 Ap '59.  
(MIRA 12:6)

1. From the department of physiology, Agricultural Institute,  
Orenburg.

(REFLEX, CONDITIONED,  
digestive in sheep (Rus))

**DEKASHEV, Ya.P.**

Exteroceptive and interoceptive conditioned reflex effects on the motor activity of the reticulum and rumen in sheep. *Fiziol.zhur.* 45 no.10:1259-1262 0 '59. (MIRA 13:2)

1. Kafedra fiziologii zhivotnykh Sel'skokhozyaystvennogo instituta, Orenburg.

(REFLEX CONDITIONED)

(STOMACH physiol.)

DEDASHEV, Ya.P.

Effect of some feeds on the motor activity of the stomach in  
sheep. Trudy oren. otd. Vses. fiziol. ob-va no.2:55-58'60  
(MIRA 16:8)

1. Kafedra fiziologii zhivotnykh (zav. - prof. Ye.T.Khrutskiy)  
Orenburgskogo sel'skokhozyaystvennogo instituta.  
(SHEEP FEEDING AND FEEDS) (GASTROINTESTINAL MOTILITY)

474/60.

621.030.558

Measurement of the length of the diffusion path of neutrons.  
Gy. Csikaj, K. Dede, Magyar Fizikai Folyóirat,  
Vol. 8, 1960, No. 1, pp. 1-11, 8 figs., 1 tab.

3  
FJJP(c)

In order to increase the thermal efficiency of power-producing nuclear reactors, it would be advantageous to use an organic liquid having a higher boiling point than water as moderator and cooling medium. If other physical and chemical properties are satisfactory, the suitability of the material can be decided on the basis of the neutron moderating effect; it is especially important to know the length of the diffusion path of the thermal neutrons. A stationary method was applied to determine the length of the diffusion path in media containing hydrogen, using small quantities of material. The practicability of the method was checked by measuring

the length of the diffusion path of water. The measurements were made in three different geometrical arrangements, (1) a finite cylindrical medium and planar source with circular symmetry; (2) infinite moderator and planar source with circular symmetry; (3) infinite moderator and infinite homogeneous planar source. The results for distilled water at 20° C were: (1)  $L = 2.75 \pm 0.08$  cm, (2)  $2.73 \pm 0.04$  cm, (3)  $2.74 \pm 0.08$  cm. The agreement of the three measurements with each other and with the most recently published data proves the reliability of the method; the length of the diffusion paths of the neutrons can be determined comparatively quickly, by simple means and from small samples with satisfactory accuracy.

CSIKAI, Gyula (Debrecen); DAROCZY, Sandor (Debrecen); DEDE, Kalman (Debrecen)

Measuring the diffusion length of neutrons in water between 16-89 C°  
and in diphyl(dowtherm A) at 185 C°. Magy fiz folyoir 9 no.3:175-180  
'61.

1. Magyar Tudományos Akademia Atommag Kutato Intezete, Debrecen.

DEFE 11  
 341. Rutin as an inorganic analytical reagent. I.  
 P. Searcy, Z. Jancsik and J. Dede (1954) for  
 Iron, and Anal. Chem., Kossuth Lajos St. 1/4, v.  
 Debrecen, Hungary. Magyar Kém. Foly., 1954,  
 83 (1-6), 161-162. Rutin gives colour reactions  
 with many cations. Small amounts of  $Fe^{3+}$  in  
 alkaline medium give a reddish-brown colour and  
 $Fe^{3+}$  in acid medium, in the presence of persulphate,  
 give a brownish-green colour;  $UV^{4+}$  or  $Ti^{4+}$  at pH 6  
 to 8 and  $V^{5+}$  in  $H_2O$  soln. give an orange-red  
 colour. The sensitivity of these reactions is 0.3  
 to 100  $\mu g$  of metal per ml. The colour reactions  
 can be made largely specific for the various ions by  
 a suitable choice of buffer, pH, complexing agent  
 and order of mixing the reagents, etc. Some of  
 these colour reactions can be adapted for quant.  
 spectrophotometric determinations. A. G. Pazo

CSERI, Zoltan; DEDE, Laszlo; TOTH, Akos; HANKO, Janos

Experiments for using tetracycline derivatives in the canned industry. I. (To be contd.) Konzerv paprika no.5:145-150 S-0 '62.

1. Chinoin Gyogyszergyar (for Cseri, Dede, Toth). 2. Duna Konzervgyar (for Hanko).



DAVID, Agoston; DEDE, Laszlo; HORVATH, Gabor

Evaluation of paper chromatographic contact photocopies. Magyar  
kem lap 18 no.2/3:146-147 F-Mr '63.

1. Chinoin Gyogyszer es Vegyeszeti Termek Gyara.

DEDE, S. S., Cand Geol-Min Sci -- (diss) "Geological structure of the Bul'chizskiy body of ultrabasic rock and principles of distribution of chromite deposits (Albania)." Moscow, State Geological Engineering Publishing House, 1960. 26 pp; (Academy of Sciences USSR, Inst of the Geology of Ore Deposits, Petrography, Mineralogy, and Geochemistry); 180 copies; price not given; (KL, 26-60, 132)

CSERI, Zoltan; HANKO, Janos; DEDE, Zoltan; TOTH, Akos

Experiments for use of tetracycline derivatives in the canning industry.II. Konzerv paprika no.6:194--197 N-D '62.

1. Duna Konzervgyar (for Dede). 2. Chinoin Gyogyszergyar (for Cseri, Hanko, and Toth).

19																									
PROCESSES AND PROPERTIES INDEX													180 AND 4TH CATEGORIES												
<p>The use of noble metals in the glass industry, J. Maderich. <i>Sito a Nibutorie</i> 1989, Nos. 2, 3, 4 and 5, pp. 15, 21; 22; <i>Chem. Obzor</i> 14, 175.--1. describes the chem. properties of Ag, Au and Pt used in the molten state or as a powder for decorating glass. Frank Marsh</p>																									
430 35A METALLURGICAL LITERATURE CLASSIFICATION																									
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BIBLIOGRAPHY													BIBLIOGRAPHY												

COMMON ELEMENTS										COMMON VARIANTS									
MATERIALS INDEX										PROCESS AND PROPERTIES INDEX									
<p>Painting and etching techniques for glass. Jaroslav Dvornik. <i>Zbornik Radova</i> 18, 64-6, 89-91, 185 0; 19, 32-4, 46-51(1948); <i>Chem. Zvez.</i> 1948, II, 1930-1. — Historical development of glass painting technique, kinds of glass painting, app., preps. and use of glass colors, mech. directions and practical experience in painting, painting with opaque enamels; recipes and instructions, relief painting, a new type of painting with accurately limited contours with the help of glue; recipes and chem. constitution for enamels in the following colors: bright red, crimson (with Al, Mg or Sn), blood red, chrome green, bright yellow, Naples yellow, green, blue, brown, ochre and black; opaque and mottled enamels; ovens, grinding machines for colors, grinding and mixing of colors; transparent enamels; details on working with fused, water-color type colors; painting with metals and metal compds. (recipes and working directions). M. McMahon</p>																			
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION										ENTRANCE									
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1" AND 2" INDEX										1" AND 2" INDEX									
PROCESSES AND PROPERTIES INDEX																			
<p>Techniques of glass painting and etching. JARONIA, Dabinski. <i>Silverske Raschedy</i> 19, no. 52, 121-6, 100-7 (1942); <i>Chem. Zentr.</i> 1943, I, 1800; cf. C. A. 38, 8009t. Topics discussed include: glasses, yellow glasses, reproduction of Venetian glass, the burning of colors into the glass, various reproduction techniques for the painting and etching of glass, etching and color printing of plates, transfer designs, silvering and smearing of glass objects, polishing, etc. Recipes are given for glasses, for coating to protect the areas not to be etched, and for silvering and matting baths. M. C. Moore</p>																			
AS - S-L-A METALLURGICAL LITERATURE CLASSIFICATION																			
FROM: SYNDICATE										FROM: BOWLING									
SYNDICATE										BOWLING									

DEDECEK, J.

Precious metals used in painting glass, p. 178, SKLAR A KERAMIK  
(Ministerstvo lehkeho prumyslu) Praha, Vol. 5, No. 8, Aug. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1953

WUNDER, R. MUDr.; VOLNA, A.; HUDAK, A., prom. lek.; DEDEK, J., doc. dr.

Analysis of malignant neoplasms in autopsied cases in the  
Czechoslovakian SSR. Ces. zdrav. 12 no.10:501-509 0 '64.

1. Katedra organizacie zdravotnictva Lekarskej fakulty  
University Komenskeho v Bratislave.



CZECHOSLOVAKIA

DEDECKOVA-SALOVA, J.; Central Research Institute of Animal Production (Ustredni Vyzkumny Ustav Zivocisne Vyroby), Uhřetěves.

"Development of Bohemian Cattle Heifers as a Function of the Level of Feeding."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 5, Sep 66, p 369

Abstract: In an experiment the food available to the heifers was decreased for the first six months of life 25% below normal, and in the following 6 months increased 20% above normal. Very little influence due to these changes could be observed; only the rate of breathing was slightly reduced by the limited food supply. When the heifers were fed normally for the first 6 months and for the second 6 months the food supply was reduced to 50% of the normal, the growth and development of the heifers was reduced substantially by the reduction in the food supply. Body temperature was not affected by these changes. 1 Figure, no references. Submitted at 3 Days of Physiology of Domestic Animals at Liblice, 9 Dec 66.

BARDOS, V.; ADAMCOVA, J.; DEDEI, S.; GJINI, N.; ROSICKY, B.; SIMKOVA, A.

Neutralizing antibodies against some neurotropic viruses determined in human sera in Albania. J. Hyg. Epidem., Praha 3 no.3:277-282 1959

1. Institute of Epidemiology and Microbiology, Bratislava, Ministry of Health of the Albanian People's Republic, Tirana, Institute of Biology, Czechoslovak Academy of Sciences, Prague.  
(VIRUS DISEASES, immunol)

SEBOR, G., inz.; DEDEK, F., inz.

- Operational experience with the coal slurry drainage by the centrifugal machine UCM - 1U. Paliva 42 no.8:233-235 Ag '62.

1. Hornický ustav, Československá akademie věd.

DEDEK, Frantisek, inz.

Use of new methods in coal flotation research. Paliva 42 no.8:225-228  
Ag '62.

1. Hornický ústav, Československá akademie věd.

DEDEK, F., inz.; DOCKAL, M.

Use of fast motion pictures for examination of certain effects  
in coal preparation. Paliva 43 no.9:272-274 S'63.

1. Hornický ustav, Československá akademie věd.

SEBOR, G., inz. CSc.; DEDEK, F., inz. CSc.; COUFALIK, J.

~~Separation of the flotation concentrate and flotation waste.~~  
Paliva 45 no.1:8-12 Ja '65.

1. Institute of Mining of the Czechoslovak Academy of Sciences,  
Prague (for Sebor and Dedek). 2. Association of the Ostrava-  
Karvina Mines, Ostrava (for Coufalik).

COMMON ELEMENTS		WATER-SOLUBLE		ACID-SOLUBLE		TOTAL	
PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
100	100	100	100	100	100	100	100
90	90	90	90	90	90	90	90
80	80	80	80	80	80	80	80
70	70	70	70	70	70	70	70
60	60	60	60	60	60	60	60
50	50	50	50	50	50	50	50
40	40	40	40	40	40	40	40
30	30	30	30	30	30	30	30
20	20	20	20	20	20	20	20
10	10	10	10	10	10	10	10
0	0	0	0	0	0	0	0

**DEDEK, JAROSLAV**

**CA**

**14**

The influence of the soil on the composition of sugar beets. J. Dedeck, *Lisny Cukrovnik*, 58, 327-332(1940); cf. C.A. 37, 5477. D. planted 4 different beet brands in 4 different adjacent fields and found the sugar content varying from 18.0 to 18.7%. Because climate, rain, etc., was not a factor responsible for the variation, D. concludes that the differences can be attributed to some factor in the soil. D. repeated the expts. but added an ordinary amount of N fertilizer to some of the plots and an excess of the N fertilizer to others. With an excess of N, the wt. of the beet root rose from 624 to 757, the sugar concn. fell from 19.0 to 14.7%, the nonsugars in the light juice rose from 4.7 to 13.9%, the N rose from 0.23 to 0.67%, the Ca salts rose from 0.0082 to 0.226%, the color rose from 3.6 to 10.4, and the invert sugar rose from 8.7 to 23.0 units. The changes induced by the excess of a N fertilizer exceed those induced by the changes in climate. In further expts. comparative plots treated with a normal quantity of fertilizer, an excess of N, an excess of P, and an excess of both N and P yielded beets and juices which behaved differently in the filter, during auto., etc.

F. Maresh

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

62-12-1000

CA DEDEK, JAROSLAV

28

Ion exchangers in sugar-beet technology. J. Dědek, D. Ivandenko, and V. Zerkalej. *Liby. Chém. 69: 69-72 (1948).*—In 3 sugar factories the natd. juices filtered through artificial ion exchangers lost: 72% of the apparent nonsugars, 89% of the org. nonsugars, 87% of the ash, 98% of the  $\text{CaO}$ , 85% of the  $\text{K}_2\text{O}$  and  $\text{Na}_2\text{O}$ , 75% of the total N, 65% of the tannin-pptd. N, 65% of the W-pptd. N, 62% of the N detd. by the Van Slyke method, 80% of the unspecified N, 70% of the  $\text{CO}_2$ , and 84% of the coloring substances. The widest variations in removal occurred for  $\text{K}_2\text{O}$ ,  $\text{Na}_2\text{O}$ , W-pptd. N, and  $\text{CO}_2$ ; the closest similarity, in  $\text{CaO}$  and total N. Frank Marresh

ASH-51A METALLURGICAL LITERATURE CLASSIFICATION

ALPHABETIC INDEX

1ST AND 2ND LETTERS

3RD AND 4TH LETTERS

5TH AND 6TH LETTERS

7TH AND 8TH LETTERS

9TH AND 10TH LETTERS

11TH AND 12TH LETTERS

13TH AND 14TH LETTERS

15TH AND 16TH LETTERS

17TH AND 18TH LETTERS

19TH AND 20TH LETTERS

21ST AND 22ND LETTERS

23RD AND 24TH LETTERS

25TH AND 26TH LETTERS

27TH AND 28TH LETTERS

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89TH AND 90TH LETTERS

91ST AND 92ND LETTERS

93RD AND 94TH LETTERS

95TH AND 96TH LETTERS

97TH AND 98TH LETTERS

99TH AND 100TH LETTERS



Manufacture of an extra-axial ...

Z/013/62/000/003/001/001  
D006/D102

Final figuring with pitch lap was made using the Hartmann and Chikolev tests. The Foucault test in an autocollimating arrangement was also tried. As the final step, extra-axial mirrors were cut out of the paraboloidal mirror. There are 9 figures and 1 table. The most important English-language reference reads as follows: F. Twyman, F.R.S. Prism and Lens making.

ASSOCIATION: Výzkumný ústav monokrystalů (Single Crystals Research Institute),  
Turnov

Card 2/2

BENIAK, Milan Lekar, prom.; DEDEK, Jozef, MUDr.

A contribution to the problem of training medical students in health education. Cesk. zdrav. 10 no.1:45-48 '62.

1. Katedra organizacie zdravotnictva LFUK v Bratislave.  
(HEALTH EDUCATION) (EDUCATION MEDICAL)

SOLC, I., dr.; KOTLEROVA, J.; DEDEK, J.

Experience with grinding the aspheric surfaces in using ring-shaped instruments. Jemna mech opt 7 no.1:2-3 Ja '62.

1. Vyskumný ustav pro mineraly, Turnov.

DEDEK, K.  
FODEL, R.

New methods for drafting output and operation plans in quarries. p. 405.

STAVIVO. (Ministerstvo stavebnictvi) Praha, Czechoslovakia, Vol. 36,  
no. 10, Oct. 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July  
1959 uncla.

DEDEK, K., inz.

Economy in developing cement and lime quarries. Stavivo 41  
no.4:139-140 Ap '63.

1. Keramoprojekt, Trenčin.

Country : CZECHOSLOVAKIA  
Category : Chemical Technology. Chemical Products (Part 3).  
Food Industry  
abs. Jour. : Ref Zhurzhin, 1956, No 7, 23265  
Author : Khez, V.; Dedek, H.; Vedlich, H.  
Instit. : -  
Title : Washing and Disinfection of Equipment Used in  
Enterprises of the Dairy Industry  
Orig. Pub. : Trumyal potravin, 1957, 8, No 10, 527-531  
Abstract : A survey of the existing methods and a descrip-  
tion of the proposed method are given. A scheme  
is attached.

Card: 1/1

*DEDEK, Miroslav*

CZECHOSLOVAKIA / Chemical Technology, Chemical Prod- H  
ucts and Their Application, Part 3. -  
Food Industry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 62703.

Author : Miloslav Vedlich, Miroslav Dedek.  
Inst : Not given.  
Title : For a Higher Efficiency of Continuous Butter  
Production.

Orig Pub: Prumysl potraviny, 1958, 9, No 2, 62 - 64.

Abstract: Conditions of, and grounds for, establishing  
continuous butter production in Czechoslo-  
vakia are discussed.

Card 1/1

27

DEDEK, M.; VEDLICH, M.; KNEZ, V

"A draft of mechanized and nearly automatized curd-production lines." p. 241

PRUMYSL POTRAVIN. Praha, Czechoslovakia, Vol. 9, No. 5, May, 1958

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September, 1959  
Unclas



DEDEK, M., inz.

"Key to bacteria determination" by Jan Arpai. Reviewed by  
M. Dedek. Prum potravin 15 no.4:203 Ap '64.

DEDEK, V

18  
4  
11  
29  
Improvements in the Cold Rolling of Oriented Transformer  
Steels to 500 mm Wide. H. Adk and V. Dedek. *Met.  
Sci. Lett.*, 1957, 12, (9), 353-357. The present process of  
manufacture is described and conditions of cold working are  
analyzed. Optimum intermediate annealing conditions and  
thermal range for working are determined. A process for  
rolling 2.8-3.4% Si steel to 0.33 mm thickness, annealed  
and cold rolled with an intermediate anneal is developed.  
Yield stress are ~ 0.33-0.4% at B = 10,000

DEDEK, V.

TECHNOLOGY

periodicals: HUTNICKE LISTY Vol. 13, no. 10, Oct. 1958

DEDEK, V. The effect of the eccentricity of Stiefel piercing mills on the possibility of formation of outside spiral-like defects in blanks during piercing. p.882

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 5  
May 1959, Unclass.

Z/034/61/000/001/017/021  
EO73/E535

AUTHOR: Dědek, Vladimír, Engineer

TITLE: Investigation of the Grooving of a Stiefel Piercing  
Stand

PERIODICAL: Hutnické listy, 1961, No.1, p.66

TEXT: A greater length of the deformation zone, a greater axial speed of the blank and of the tangential sliding during piercing and a smaller eccentricity of the piercing mill have the greatest influence on reducing the twisting of rolled blanks during piercing and thus on reducing the formation of external spiral defects. The grooving of the piercing rolls has been modified to reduce the possibility of formation of external spiral defects during piercing. The angle of inclination of the deformation cones was reduced, the lengths of the piercing mandrels and of the guides was increased, the symmetry of the deformation zone was improved and a standard dimension and shape of the piercing discs was proposed. The new grooving problem was solved from the point of view of obtaining higher service life of the piercing tools, a greater dimensional accuracy of the rolled material and for providing the possibility of rolling blanks with smaller wall

Card 1/2

Z/034/61/000/001/017/021  
E073/E535

Investigation of the Grooving of a Stiefel Piercing Stand  
thicknesses. The new grooving has been successfully tested.

ASSOCIATION: Výzkumný ústav VŽKG  
(Research Institute VŽKG)

Card 2/2

— DPEK, VI, inz.

The new in the intensification of bundle annealing. Put listy 20  
no.1:63-67 Ja '65.

112-112, 112-112  
The action of methyl iodide on 1-methyl-2-ethyl-2-pyr-  
rolidine, Rudolf Laker and Valer Džek (Vys. škola chem.  
technol., Prague), Chem. 177, 31, 2059-61 (1957). 1-  
Methyl-2-ethyl-2-pyrrolidine (I) gives with MeI 1,1-dimethyl-  
2-ethylpyrrolidinium (II) iodide, and 1-methyl-2-isopropyl-2-  
pyrrolidine (III) as a product of C-alkylation. Adding 60 g.  
MeI to an ice-cooled soln. of 19 g. I, in 50-40, in 150 ml.  
C<sub>2</sub>H<sub>5</sub>, dissolving the ppt. after 16 hrs. with H<sub>2</sub>O, sepg. the  
aq. layer, extg. with three 50-ml. portions of CCl<sub>4</sub>, alkaliz-  
ing with an excess of Ba(OH)<sub>2</sub>, and steam-distg. gave 64%  
of volatile bases (A) and a nonvolatile residue (B). Neu-  
tralization of A with HCl, evapn. *in vacuo*, treatment of the  
residue with 28 g. NaClO<sub>2</sub>, H<sub>2</sub>O in hot alc., and crystn. gave  
HClO<sub>4</sub> salt (IV) of III, m. 176-7°; free base III, bp 69-70°,  
n<sub>D</sub><sup>20</sup> 1.4369; infrared spectra are given. Transforming 1.2 g.  
IV to the HCl salt of III and heating with 3 g. HCO<sub>2</sub>K and 5  
ml. 98% HCO<sub>2</sub>H at 160-5° gave 90% 1-methyl-2-isopropyl-  
pyrrolidine; picrate, m. 185-8° (EtOH); transforming the  
mht. remaining after the isolation of IV to HCl salts  
and heating with 16 g. HCO<sub>2</sub>K and 15 ml. 98% HCO<sub>2</sub>H at  
160-5° gave 97.5% 1-methyl-2-ethylpyrrolidine, b. 127-  
30°, n<sub>D</sub><sup>20</sup> 1.4360. The mother liquor of A gave Na III,  
dipicrate, m. 197-8° (EtOH). Treating B with CO<sub>2</sub>,  
H<sub>2</sub>SO<sub>4</sub>, Ag<sub>2</sub>O, neutralizing the filtrate with HCl, and treat-  
ing 25% of the soln. with Na picrate gave II picrate,  
m. 204-10° (H<sub>2</sub>O). Treating the remaining 75% of the  
soln. with Ag<sub>2</sub>O, then with AcOEt, and distg. the acetate  
gave, in addn. to pyrrolid., 1: HClO<sub>4</sub> salt, m. 203-4° (H<sub>2</sub>O).  
Treatment with 6 g. HCO<sub>2</sub>K and 5 ml. 98% HCO<sub>2</sub>H at 160-  
5° yielded 90% 1-methyl-2-ethylpyrrolidine, bp 124-9°, n<sub>D</sub><sup>20</sup>  
1.4352.  
M. Hudlický

[illegible]



**Rudolph L. Lutz, Valery D. Dück**

mole II with ice-cooling and working up the mixt. after 40 hrs. gave 1.5 g.  $HCO_2$  salt of 1,3-dimethyl-2-ethyl-3-pyrrolidone; free base, bp 45-5°, in 34°, mp 1.1712. Alkalization of the mother liquors, steam-distn., and treatment of the residue with picric acid gave 2.8 g. picrate of 1,3-dimethyl-2-ethylpyrrolidine, m. 221-2° (EtOH); free base, bp 18-5°, mp 1.4585. Treating 0.3 mole  $PrMgBr$  in 150 ml.  $Et_2O$  with 11.4 g. II gave 2 g.  $HCO_2$  salt of 1,3-dimethyl-2-isopropylpyrrolidine, m. 210-11° (EtOH); free base, bp 55-9°, mp 1.4732. The mother liquor yielded 4.1 g. picrate of 1,3-dimethyl-2-isopropylpyrrolidine, m. 211-1° (EtOH); free base, bp 105-4°, mp 1.4461. In 50 ml.  $Et_2O$  the reaction gave lower yields. Replacing  $Et_2O$  with  $CCl_4$  in a soln. of 0.3 mole  $PrMgBr$  in 150 ml.  $Et_2O$  and working up the mixt. after 15 hrs. gave 8 g.  $HCO_2$  salt of 1,3-dimethyl-2-propylpyrrolidine (VII), m. 130-1° (EtOH); free base, bp 100-2°, mp 1.4710. The mother liquor yielded the picrate of 1,3-dimethyl-2-propylpyrrolidine (D), m. 108-4°; free base, bp 20°, mp 1.4595. Refluxing 8.7 g. II and 1.6 mole  $PrMgBr$  in 60 ml.  $Et_2O$  5 hrs. yielded 37.5% VII and 31% IX. Adding 11.3 g. II to 1.3 mole  $MeMgI$  in 100 ml. boiling  $Et_2O$  and refluxing 9 hrs. yielded after 2 days 11.4 g. 54%  $HCO_2$  salt of 1,3,3-trimethyl-3-pyrrolidine, m. 238-5° (EtOH); free base, bp 57°, mp 1.4880. The mother liquors yielded picrate of 1,3,3-trimethyl-3-pyrrolidine, m. 241° (decampn.) (EtOH). Adding 5.5 g. II to 0.15 mole  $PrMgBr$  in 75 ml.  $Et_2O$  with ice cooling yielded 1.4 g. 17% salt of 1,3,3-trimethyl-3-ethyl-3-pyrrolidine, m. 189-61° (EtOH); free base (X), bp 75-4°, mp 1.4723; from the mother liquor was isolated the picrate of 1,3,3-trimethyl-3-ethyl-3-pyrrolidine.

2,2-dialkylpyrrolidine (XI), m. 214-15° (ag. EtOH). Carry-  
 ing out the reaction at reflux temp. 10 hrs. gave 83% I and  
 4% XI. Treating 0.3 mole MeHgI in 150 ml. boiling EtO  
 with 12.7 g. III and refluxing the mixt. 10 hrs. gave the  
 HClO<sub>4</sub> salt of 1,3-bis(2-ethyl-7-methyl-2-oxabicyclo[2.2.1]hept-5-yl)-5-oxa-  
 1,3-dioxane (EtOH). M. Hixley

DEDEK V.

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67514.

Author : Lukes R., Dedek V.

Inst : Not given.

Title : Reduction of Chlorhydrates of the  $\Delta^2$ -Pyrrolines of Formic Acid.

Orig Pub: Chem. listy, 1957, 51, No 11, 2082-2085.

Abstract: Respective alkylpyrrolidines were synthesized as the result of interaction between HCOOH and the chlorhydrates of alkyl- $\Delta^2$ -pyrrolines or 2-alkylidenpyrrolidines. The reaction is stereospecific in nature. For example, during the reduction of

*Higher School of Chemical Technology - Prague*

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67514.

Abstract: the 1,3-dimethyl-2-propyl- $\Delta^2$ -pyrroline chlorhydrate, only one out of two possible diastereoisomers, i.e. 1,3-dimethyl-2-propylpyrrolidine (I), was obtained. Chlorhydrate of a saturated base is heated with 98% HCOOH and HCOOK at 150-160° until the evolution of CO<sub>2</sub> ceases (4-8 hours) followed by alkalyzation and by steam distillation. The distillate is then neutralized with HCl (acid) and precipitated with sodium picrate. A free radical is isolated upon treatment of the precipitate with Na<sub>2</sub>CO<sub>3</sub> and steam distillation. With the use of the described method, the following substances were obtained (given below are: substance, yield in %, boiling point in °C/744m, n<sub>D</sub><sup>20</sup>, melting point in °C of picrate): 1-methyl-2-ethyl-

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67514.

Abstract: pyrrolidine, 98,-,-,170-171; 1-methyl-2-isopropyl-pyrrolidine, 78, 138-139, 1.4382, 179-180; 1,3-dimethyl-2-isopropylpyrrolidine, 77,-,-, 180-181; I, 76, 162-164, 1.4395, 211-212; 1,2,3,3-tetramethyl-pyrrolidine, 80.5,-,-, 249-250; 1,3,3-trimethyl-4-ethylpyrrolidine, 91.6,-,-, 224-225.

Card 3/3

DEDEK, V.

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67513.

Author : Lukes R., Dedek V.

Inst : Not given.

Title : Syntheses of 1,3- Dimethylpyrrolidone-2 and of 1,3,3-Trimethylpyrrolidone-2.

Orig Pub: Chem. listy, 1957, 51, No 11, 2139-2142.

Abstract: By means of saponification (~~KOH~~ and alcohol) and by subsequent decarboxylation (J. Amer. Chem. Soc., 1896, 69, 161) of ethyl ester of the methyl-( $\beta$ -phenoxyethyl)-malonic acid, having a boiling point of 177-182°/7mm (Adams R., Rogers E. F.,

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67513.

Abstract: J. Amer. Chem. Soc., 1941, 63, 228),  $\alpha$ -methyl- $\gamma$ -phenoxyfatty acid (90% yield, 160-165°/mm boiling point, 78-79° melting point) is obtained. The latter is then heated for 10 hours with the 48% HBr, dissolve the product in KOH, saturate it with CO<sub>2</sub>, wash it with ether, reduce its volume, boil it for 3 hours with HBr (acid), and extract it with ether. The obtained product is  $\alpha$ -methyl- $\gamma$ -butyrolacton (I), yield 90%, boiling point 103-105°/40 mm. When a mixture of I and of liquid NH<sub>2</sub>CH<sub>3</sub> is heated for 3 hours at 270-290° in an autoclave, followed by treatment with an ether solution saturated with HCl (gas) and then alkalized with K<sub>2</sub>CO<sub>3</sub>, 1.3-dimethylpyrrolidon-2 (II) having 202-203° boiling point, n<sub>D</sub><sup>20</sup> of 1.4632, d<sub>4</sub><sup>20</sup> of 0.9906 is obtained.

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67513.

Abstract: Boiling of a mixture of  $C_6H_5OCH_2CH_2Br$  and  $(CH_3)_2CHCN$  with  $NaNH_2$  in  $C_6H_6$  results in  $\alpha$ - $\alpha$ -dimethyl- $\gamma$ -phenoxybutyronitrile (III) with 148-149°/5mm boiling point, 39-40° melting point.  $\alpha$ - $\alpha$ -dimethyl- $\gamma$ -phenoxyfatty acid is obtained from the latter by using the above described method with 91.5% yield and 87-88° melting point.  $\alpha$ - $\alpha$ -dimethyl- $\gamma$ -butyrolacton (IV) with 93% yield, 92.5-93.5°/27mm, 100-101°30/mm, 198-199°744mm, and 196-197°/741 is also obtained. By the same method IV may be obtained directly from III with yield of 91%. By using the same method as used for II, 1,3,3-

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67513.

Abstract: -trimethylpyrrodon-2 may be obtained from IV. Its yield is 93.5%, boiling point 87°20/mm, and  $n_D^{20}$  is 1.4568.

Card 4/4

DEDEK, V.; LUKES, K.

"Action of methyl iodide on 1-methyl-2-ethyl- $\Delta^2$  pyrroline." (In German)

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, . Praha, Czechoslovakia,  
Vol. 23, no. 11, Nov. 1958

Monthly list of EAST EUROPEAN ACCESSIONS (EEAI), LC, Vol. 9, No. 7, July 1959, Unclass.

DEDEK, V.; LUKES, R.

"Reduction of  $\Delta^2$ -pyrroline hydrochlorides by formic acid." (In German)

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, . Praha, Czechoslovakia,  
Vol. 23, no. 11, Nov. 1958

MONTHLY LIST of EAST EUROPEAN ACCESSIONS (EEAJ), LC, Vol. 8, No. 7, July 1959, Unclas.

CZECHOSLOVAKIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 10, 1959, 34861.

Author : Lukes, R., Dedek, V., Novotny, L.

Inst : Not given.

Title : Structure of  $\Delta^2$ -Pyrrolins.

Orig Pub: Chem. listy, 1958, 52, No 4, 654-662.

Abstract: Investigations of infra-red spectra of the products of the substitution reaction involving 1-methylpyrrolidons -2 and  $RCH_2MgX$  [which were previously assumed as substitutions of 1-methyl-2-alkyl- $\Delta^2$ -pyrrolins  $CH_3NCH_2CH_2C(R')=CCH_2R$  (I) or a mixture of I with the substituted 1-methyl-2-alkylidenopyrrolidins  $CH_3NCH_2CH_2CH(R')C=CHR$  (II)] showed that they have the structure of II, if  $R \neq H$  or  $RCH_2 \neq C_6H_5$ , or they belong to an-

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CZECHOSLOVAKIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 10, 1959, 34381.

Abstract: other group that excludes presence of the exocyclic double bond. II, R = H, R' = CH<sub>3</sub> (IIa); II, R' = H, R = C<sub>2</sub>H<sub>5</sub> (IIb); II, R' = H, R = C<sub>3</sub>H<sub>7</sub> (IIc); II, R' = CH<sub>3</sub>, R = CH<sub>3</sub> (IId); II, R = CH<sub>3</sub>, R = C<sub>2</sub>H<sub>5</sub> (IIe), 1,3-dimethyl-2-isopropylidene-pyrrolidin (III), 1,3,3-trimethyl-2-ethylidenepyrrolidin (IV), and 1-methyl-2-benzylidenepyrrolidin (V) do not contain admixtures of isomers of type I, while in I (R = R' = H) (Ia) there is only a double bond as it is in 1-methyl-2-phenylpyrrolin (VI). 1,2,3-trimethyl- $\Delta^2$ -pyrrolin (VII) contains isomers of type II, and 1-methyl-2-isopropylidenepyrrolidin (VIII) contains types of I and II in equal proportion. Absorptional maximum of the valence oscillations of exocyclical

Card 2/5

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CZECHOSLOV.KIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 10, 1959, 34381.

Abstract: double bond of the  $\alpha, \beta$ -saturated tert-amines, determined by infra-red spectrum for IV is equal to 1665  $\text{cm}^{-1}$ ; with the maximum corresponding to approx. 1640  $\text{cm}^{-1}$ . The maximum of the curve peak exists at around 1700-1710  $\text{cm}^{-1}$ . It is characteristic to compounds of type I and II and mistakenly is attributed to the exocyclical double bond (Ref Zhur-Khimiya, 1956, 12725). It belongs to aminoketones such as  $\text{CH}_3\text{NHCH}_2\text{CH}_2\text{CHR}'\text{COCH}_2\text{R}$  which form in the hydration of I and II obtained from perchlorates through the action of concentrated NaOH solution. I and II are steam distilled and are purified by the usual method, using HCl-salts. Presented below are: substance, boiling point in  $^\circ\text{C}/\text{mm}$ ,  $n_{\text{D}}^{20}$ , melting point in  $^\circ\text{C}$  of base perchlorates: Ia, 65-67/86,

Card 3/5

CZECHOSLOVAKIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 10, 1959, 34881.

Abstract: 1.5052, 238; IIa, 77-78/85, 1.4820, 208-209;  
 b) 91-92/75, 1.4800, 97-98; c) 101-102/63,  
 1.4778, 116-117; d) 84/81, 1.4742, 234; c)  
 90-92/59-60, 1.4710, 130-131; III, 88-89/67,  
 1.4753, 210-211; IV, 78-79/35, 1.4723, 259-261;  
 V, 160-161/17, 1.6352, -; VI, 109-110/15, 1.5761,  
 -; VII, 57/57, 1.4850, 235-236; VIII, 70-72/51  
 (69/53), 1.4660, 176-177. When the double bond  
 is restored in I and II, the maxima disappear in  
 the regions of 700-800  $\text{cm}^{-1}$  and 1500-1900  $\text{cm}^{-1}$ .  
 Infra-red spectra were also investigated of the  
 following: 1-methyl-2-alkylpyrrolidins (given  
 below: alkyl, boiling point in  $^{\circ}\text{C}/\text{mm}$ ,  $n_D^{20}$ , and  
 melting point in  $^{\circ}\text{C}$  of picrate):  $\text{CH}_3$ , 124.5-125/  
 760, 1.4338, 170-171 (from alc.); iso- $\text{C}_3\text{H}_7$ , 138-  
 139/744, 1.4382, 165-166 (from alc.);  $\text{C}_6\text{H}_5$ , 92-

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CZECHOSLOVAKIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 10, 1959, 34881.

Abstract: 93/11, 1.5245, 145-146; and also for 1,3-dimethyl-2-alkylpyrrolidins:  $n\text{-C}_3\text{H}_7$ , 162-164/744, 1.4395, 116-117 (from alc. water);  $\text{iso-C}_3\text{H}_7$ , 162-164/741, 1.4451, 180-181 (from alc). For the sake of comparison are determined infra-red spectra of 1-methylaminoheptan-6, hydrino ( $83.5^\circ/16$  mm boiling point,  $1.4555 n_{\text{D}}^{20}$ ), 1-methylpyrrolidon-2 ( $202^\circ$  boiling point,  $1.4705 n_{\text{D}}^{20}$ ). Curves for infra-red spectra for all of the obtained compound are presented. -- Jaromir Plessek.

Card 5/5



ABS. JOUR. : RZhKhim., no. 1959, No. 3665  
 AUTHOR : Lukes, R.; Dedek, V.  
 INST. :  
 TITLE : The Action of Grignard Reagents on Amide  
 Group. XXII. On 1,3-Dimethyl-2-Alkyl- $\Delta^2$ -  
 Pyrrolines and 1,3,3-Trimethyl-2-Alkylidene-  
 ORIG. PUB. : Collect. Czechosl. Chem. Commun, 1959, 24,  
 No 2, 391-399  
 ABSTRACT : See RZhKhim, 1958, No 21, 70862.

CARD:

Pyrrolidines.

COUNTRY : Czechoslovakia

G-2



DEDEK, V.: FRIES, M.

"An international symposium on microchemistry"

Chemické Listy. Praha, Czechoslovakia. Vol. 53, no. 3, Mar 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclass

67141

187100

AUTHOR: Dědek, Vladimír, Engineer

CZECH/34-60-1-23/23

TITLE: Possibilities of Speeding-up the Softening Cycle of Higher Carbon Steels 18

PERIODICAL: Hutnické listy, 1960, Nr 1, pp 73 - 84

ABSTRACT: In the first part a detailed review is given of published information on this subject (27 references). All the methods applied for the softening cycle, which are described in the quoted literature, relate to steels which were machined after annealing and possibly also hardened. Relatively little is known on the applicability of any of these methods for the softening cycle of cutting steels which, after hot or cold shaping, are quenched and tempered and finally ground. Very frequently, such steels must have good cutting qualities, a high hardness and also a high toughness. To obtain more information on this subject the author carried out experiments with the Czech steel 14180, the composition of which was as follows: 0.7-0.8% C; 0.4-0.5% Mn, max 0.35% Si, Max 0.03% P, max 0.03% S, 0.4-0.6% Cr. He investigated the influence of various types of softening cycles on the quality of the

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CZECH/34-60-1-23/23

Possibilities of Speeding-up the Softening Cycle of Higher Carbon Steels

microstructure, mainly on the uniformity of the distribution and the size of the cementite globules in the basic ferritic mass. In addition to determining optimum conditions for the softening cycle of this steel, the studies were also aimed at obtaining basic information on correct annealing of other types of high-carbon steels. Main attention was paid to those methods of soft annealing which enabled obtaining the required structure within the shortest possible time. Therefore, the author studied the influence of the chemical composition and the purity of the steel, the state of its initial structure, the deformation in the cold state and quenching on the kinetics of spheroidisation of the cementite during the softening cycle. By preliminary cold deformation prior to annealing, a more uniform and finer structure was obtained in addition to substantial shortening of the duration of all the tested methods of annealing, which is of considerable importance for tool steels. These must be thoroughly

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Possibilities of Speeding-up the Softening Cycle of Higher Carbon Steels

CZECH/34-60-1-23/23

annealed prior to heat treatment, so that during quenching an incomplete decomposition of the carbide globules takes place as a result of which the steel will have, after tempering, in addition to the required hardness, a considerable toughness and very good cutting properties. The author gives details of the test results (Tables 1-10) and summarises the mistakes which are most frequently made in softening of high-carbon steels in the workshops. There are 18 figures, 10 tables and 27 references, of which 15 are German, 5 Czech, 2 Swedish and 5 English.

ASSOCIATION: Výzkumný ústav VŽKG, Ostrava  
(Research Institute VŽKG, Ostrava)

SUBMITTED: May 20, 1959

Card 3/3

BERNAT,P.; BRZEK,A.; DEDEK,V.; ZOUBEK,J.

Changes in the motor activity after pentazole administration in  
irradiated rats under the influence of phenobarbital inhibition.  
Cesk. fysiол. 9 no.4:375 J1 '60.

1. Farmakologicky ustav lek. fak. KU, Hradec Kralove.  
(PENTYLENETETRAZOLE pharmacol.)  
(PHENOBARBITAL pharmacol.)  
(RADIATION INJURY exper.)  
(MOVEMENT physiол.)

Z/034/62/000/001/002/011  
E160/E435

AUTHOR: Dědek, Vladimír, Engineer

TITLE: Redimensioning of the Stiefel's disc piercing mill for  
the purpose of elimination of external and internal  
defects

PERIODICAL: Hutnické listy, no.1, 1962, 9-19

TEXT: The paper deals with measures taken to eliminate the defects on the hollow shell during the production of seamless tubes. External spiral marks on the hollow shell had been the main cause of scrapping and therefore the study was directed towards their elimination. Of the factors involved, the length of the deformation region, rate of billet feed and the coefficient of sliding of the billet were found to have the greatest influence on the formation of these external spiral markings. Redimensioning of the working parts of the mill was aimed at obtaining a wall thickness of 7 to 10 mm from billets of 70-100 mm diameter and, under most favourable conditions, a wall thickness of 8 to 12 mm from billets of 110 to 130 mm in diameter, eliminating asymmetry and unequal diameters of the sizing rolls, decreasing the service

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E160/E435

Redimensioning of the ...

life of the working parts and improving the accuracy of the hollow shell. The proposed new rolls are identical in shape and in dimensions, the converging and the diverging angles being reduced from the original 15 and 17° respectively to 10° each. Thus, the deformation region lengthened and became more symmetrical. The working part of the guides was lengthened and their angles altered to match those of the rolls. The piercing mandrel was made longer and more slender. Experimentally as well as in actual application, it has been found that the working portion of the piercing mandrel should be as long as possible; the longer the piercing mandrel, the quicker the piercing operation, the less effort is required, the smaller the frequency of surface defects and the lower the mandrel temperature. For the trial piercings, new rolls, piercing mandrels and guides were made in sizes suitable for handling the two envisaged extremes of billets, i.e. 70 and 120 mm in diameter. 15 billets of each diameter were pierced, for minimum and maximum wall thickness. Part of the billet surface was grooved so that the formation of spiral surface markings could be observed. Some piercing operations were stopped in midstream for assessing the shape and length of the

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Redimensioning of the ...

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E160/E435

deformation zone. Billets were heated to 1240 - 1260°C for varying lengths of time depending on the size. Parameters for which deformation could be computed were measured. Anticipated wall thickness of the hollow shells (below 7 mm under optimum conditions) were produced from 70 mm billets. For 120 mm billets, the minimum expected shell wall thickness is obtainable under optimum conditions. Excessive wear of guides and the piercing mandrel affected dimensional tolerances and surface quality. Ovality was negligible but the uniformity of the wall thickness deviated at the ends of the shells due to vibration of the piercing mandrel. Wear of the guides contributed towards uneven wall thickness and external and internal surface defects of the hollow shells produced from 120 mm billets. There are 12 figures, 11 tables and 8 Soviet-bloc references. ✓

ASSOCIATION: Výzkumný ústav VŽKG, Ostrava  
(Research Institute VŽKG, Ostrava)

SUBMITTED: August 29, 1961

Card 3/3

DEDEK, Vladimir, inz.; ZIDEK, Milan, inz., kandidat technickych ved

Hot and cold rolling of steel strips for dynamo sheets. Hut  
listy 17 no.2:101-110 F '62.

1. Vyzkumny ustav, Vitkovicke zelesarny Klementa Gottwalda,  
Ostrava.

ZDENEK, Z., inz.; KECLIK, V.; DEDEK, Vlad., inz.; KRUMNIKL, Fr., inz.;  
VYSTYD, M.; JENICEK, L.; LIKES, Jiri; HRANOS, Zd., inz.

Information on metallurgy. Hut listy 16 no.3:217-227 Mr '61.

PUNCOCHAR, Z., inz.; BECVAR, J.; KALIVODA, A., inz.; BAUER, Jiri, inz., dr.;  
PILNER, M., inz.; DEDEK, Vlad., inz.

Information on metallurgy. Hut listy 17 no.9:676-684 S '62.

PUNCOCHAR, Z., inz.; ZDENEK, Z., inz.; KOLMINSKY, J., inz.; CHVATAL, Vlad.,  
inz.; DEDEK, Vlad., inz.; JENICEK, L.; MRAZ, V.

Informations on metallurgy. Hut listy 16 no.5:373-380 My`'61.

DEDEK, Vladimir, inz.

Technical development of the production of materials for hand saws.  
But listy 16 no.7:457-466 JI '61.

1. Vyzkumny ustav, Vitkovické selezarny Klementa Gottwalda.

PUNCOCHAR, Z.; DEDEK, Vlad., inz.; KECLIK, V., inz.; KRUMNIKL, F.; TEINDL, J.;  
BENDA, O.

Information on metallurgy. Hut listy 16 no.7:523-530  
JA 41.



DEDEK, Vladimir, inz.

Cold forming property and annealing conditions of steel bands with a high content of carbon. Hut listy 18 no.2:109-123 F '63.

1. Vyzkumny ustav, Vitkovické sešezarny Klementa Gottwalda, Ostrava.

DEDEK, Vladimir, inz.; VONDRASEK, Vaclav, doc. inz.

Contribution to the problem of the quality of nonaging  
deep-drawing steel stabilized by aluminum. Stor VSB  
Ostrava 10 no.3:329-336 '64.

1. Submitted June 15, 1963.

DEDEK, Vladimir, inz.

Present views on lubrication and its importance in the cold rolling of steel strips. Hut listy 19 no.1:27-33 Ja'64.

1. Vitkovicke zelezarny Klementa Gottwalda, Ostrava.

DEDEK, Vladimir, inz.; KURC, Jaromir; LEVAR, Emil

Operational tests of new oil emulsions in cold steel  
strip rolling. Hut listy 19 no. 2: 102-108 F '64.

1. Vitkovicke zelezarny Klementa Gottwalda, Ostrava (for  
Dedek and Kurc).
2. Benzina, n.p., Praha (for Levar).

DEDEK, Vladimir, inz.

Progress in the development of furnaces for annealing cold  
rolled steel bands. Hut listy 19 no. 7:487-499 JI'64

1. Vitkovické zelezárny Klementa Gottwalda National Enterprise,  
Ostrava

L 63306-65 EWA(d)/EWP(1)/EWP(k)/EWP(h)/EWA(c) PF-11 JD/HW

ACCESSION NR: AP5020843

CZ/0034/64/000/009/0633/0641

AUTHOR: Dedek, Vladimir (Engineer)

TITLE: Effect of finish rolling conditions on the structure and properties of hot rolled low carbon steel strips designed for cold rolling

SOURCE: Hutnicke listy, no. 9, 1964, 633-641

TOPIC TAGS: metal rolling, steel, sheet metal

Abstract [Author's English summary]: Effect of individual factors in finish rolling of the hot rolled low carbon steel strips on their structural and mechanical properties, composition and character of the scale is analyzed in detail. The analysis applies to the effect of the finish rolling temperature, to the size of the final pass reduction, and to the cooling rate of strips prior to their coiling. Based on a detailed analysis of literature data, the author established optimum finish rolling conditions with respect to the final properties of hot rolled strips designed primarily for subsequent cold rolling. Orig. art. has 5 figures, and 9 graphs.

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L 63306-65

ACCESSION NR: AP5020843

ASSOCIATION: VZKG, Ostrava

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 01)

JPRS

*dm*  
Card 2/2

L 21454-66 EWP(w)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(l)/ETC(m)-6 JD/HW

ACC NR: AP6011969

SOURCE CODE: CE/0057/65/000/003/0123/0126

AUTHOR: Dedek, Vladimir (Engineer)

ORG: Metallurgical Research Institute, KZKG, Ostrava (Vyzkumny ustav metalurgicky, VZKG)

TITLE: Comparison of the properties of cold rolled high strength steel belts conforming to foreign and Czechoslovak norms

SOURCE: Hutnik, no. 3, 1965, 123-126

TOPIC TAGS: high strength steel, cold rolling, aluminum

ABSTRACT: Czechoslovak and Russian Standard Requirements are compared, and the omissions in the Czechoslovak norms are discussed. As a result some of the Czechoslovak steels have unsatisfactory properties; a review of such instances is presented. Use of aluminum for steel stilling is recommended; fatigue resisting steels are discussed. Improvements in cold rolling machinery are evaluated. Importance of the contents of P, S, and Mn in steels is described. Orig. art. has: 1 figure and 4 tables. [JPRS]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 002  
SOV REF: 004

Card 1/1



L 22823-66 EWP(t)/EWP(k) JD/HW

ACC NR: AP6010701

SOURCE CODE: CZ/0034/65/000/004/0252/0261

AUTHOR: Dedek, Vladimir (Engineer)

ORG: Metallurgical Research Institute, VZKG, n.p., Ostrava (Vyzkumny ustav metalurgicky, VZKG, n.p.)

28  
B

TITLE: Influence of the hot rolling, cold rolling, and annealing conditions upon the properties of low carbon deep drawing strip steels

SOURCE: Hutnicke listy, no. 4, 1965, 252-261

TOPIC TAGS: metal rolling, annealing, low carbon steel, metal property, metal drawing

ABSTRACT: Influence of the operating technology upon the properties of the product carbon steel with low carbon content is discussed. Basic requirements for the successful production of deep-drawing low carbon steels are described. Deoxidation and teeming of deep drawing steel grades are discussed. Orig. art. has: 12 figures and 3 tables. [JPRS]

SUB CODE: 11, 13 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 014  
SOV REF: 009

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UDC: 669-418: 669.14.018.282: 669.15-194

L 35942-66 EWP(k)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6027382

SOURCE CODE: CZ/0034/65/000/009/0651/0658

AUTHOR: Dedek, Vladimir (Engineer); Zarsky, Jiri (Engineer)

ORG: VZKG, Ostrava

TITLE: Effect of total cold deformation and of annealing on the deep drawing properties of strip steel

SOURCE: Hutnicke listy, no. 9, 1965, 651-658

TOPIC TAGS: metal drawing, annealing, metal deformation, cold rolling, steel microstructure, pearlite, ferritic steel, tensile strength, metallurgic process

ABSTRACT:

Some steels show a non-uniform structure after the cold rolling process; this occurs when the microstructure contains cementite in coarse configurations or in the shape of lamellar pearlite on ferritic grain boundaries. Investigation covered cold rolling deformation of 20, 50, and 80%, followed by annealing at 600-800°C for 1 - 10 hours, and by cooling at a rate of 45 - 1400°C per hour. Tensile strength of the samples was measured, and comparison is made for different qualities of steels and for different locations of the test sample on the original steel strip. Orig. art. has: 9 figures and 4 tables. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 13, 11, 20 / SUBM DATE: none / ORIG REF: 002 / SOV REF: 001  
OTH REF: 004

Card 1/1 *ne*

UDC: 669.14.018.26

L 34430-66 I/EWP(t)/ETI IJP(c) JD

ACC NR. AP6026198

SOURCE CODE: CZ/0034/65/000/011/0789/0795

AUTHOR: Dedek, Vladimir (Engineer); Michl, Vladimir--Mikhl', V. (Engineer);  
Sliva, Milan (Engineer)

29  
B

ORG: VZKG, n.p., Ostrava

TITLE: Reheating conditions of process and intermediate annealing and their effect  
on the deep-drawing properties of low-carbon strip steels

SOURCE: Hutnicke listy, no. 11, 1965, 789-795

TOPIC TAGS: low carbon steel, annealing, cold rolling, metal drawing

ABSTRACT: The article reports on an investigation of cold rolled annealed deep-  
drawing strip steels regarding the feasibility of improving their structural and  
plastic properties by arrangement of the reheating conditions in the final process  
annealing as well as by intermediate annealing during the cold rolling. Orig. art.  
has: 2 figures and 8 tables. [Based on authors' Eng. abstract] [JPRS: 33,732]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

Card 1/1 *gls*

UDC: 621.785.3: 669.14.018.26

CZECHOSLOVAKIA

DVORAK, F; DEDEK, V

Institute of Organic Chemistry, Technical Institute  
of Chemistry (Institut für organische Chemie, Technische  
Hochschule für Chemie), Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications,  
No 7, July 1966, pp 2727-2736

"Electrofluorination of fluorides of chloro-acetic acid."

I. 30020-66 EWP(t)/ETI/EPF(k) IJP(c) JD/HW  
ACC NR: AF-020102 SOURCE CODE: CZ/0057/66/000/000/000/000

AUTHOR: Dedek, Vladimir (Engineer)

ORG: Metallurgical Research Institute, Klement Gottwald Vitkovice Iron Works, Ostrava  
(Vyzkumny ustav metalurgicky VZKG)

TITLE: Defects in heat treatment of cold rolled steel belts

SOURCE: Hutnik, no. 2, 1966, 87-92

TOPIC TAGS: carbon steel, sheet metal, annealing

ABSTRACT: High carbon steel sheets of great strength are obtained by annealing of quenched steels; steels containing eutectic amounts of carbon are suitable for this treatment. Isothermal quenching of steel is described. The greatest number of defects result from faulty treatment of quenched steel. Defects may be due to imperfect structure of the original material, method of decarburizing, wrong quenching temperature, wrong period of austenitization, rate of cooling, and an incorrect temperature and period of annealing. Reasons for insufficient penetration of the quenching through the metal sheet are discussed. Stresses caused in the material by quenching, and fragility due to annealing are discussed. Wrong annealing methods are reviewed. Orig. art. has: 11 figures. [JPRS]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 010  
SOV REF: 003  
Card 1/1

DEDELCE, C.

DEDELCE, CL. The Getta hydropland p. 29

Vol. 1, no. 11 Nov 1955

ARIPILE PATRIEI

TECHNOLOGY

Bucuresti, Rumania

So: Eastern European Accession Vol. 5 No. 4 April 1956

DEDELEV, G.

Sports that can be applied to military training are beginning to assume mas proportions. Voen. znan. 35 no.9:14-15 S '59.

(MIRA 12:12)

1. Predsedatel' komiteta pervichnoy organizatsii Dobrovol'nogo obshchestva sodeystviya armii aviatsii, i flotu zavoda im. S. Ordzhonikidze, g. Kol'chugino, Vladimirskoy oblasti.  
(Military education)

L. Dedenko

CALCULATION OF CERTAIN CHARACTERISTICS OF AIR SHOWERS BY THE MONTE CARLO METHOD  
L. Dedenko and G.T.Zatsepin

1. A calculation is made of the probability of observing a shower with an arbitrarily given number of particles at sea level and a fixed energy of the primary proton:  $10^{13}$  ev,  $10^{14}$  ev,  $10^{15}$  ev. An elementary model of nuclear collisions is used. The coefficient of inelasticity for the nucleons is taken to be  $K_{\text{in}} \approx 1/2$ ; for pi-mesons  $K_{\text{in}} \approx 1$ .
2. The distributions obtained yield a large ambiguity between the number of particles in the shower at sea level and the energy of the primary proton.
3. A comparison is made of the results of calculations with the experimental number of showers observed at sea level. The intensity of the primary particles with energy  $10^{13} - 10^{15}$  ev than calculated from these data is less by a factor of 1.5 than that calculated ignoring fluctuations.

Report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959



S/627/60/002/000/019/027  
D299/D305

3.24/0 (2205, 1805, 1559)

AUTHORS: Dedenko, L. G., and Zatsepin, G. T.

TITLE: Computing some air-shower characteristics with allowance for fluctuations

SOURCE: International Conference on Cosmic Radiation. Moscow, 1959. Trudy. v. 2. Shirokiye atmosferynyy livni i kaskadnyye protsessy, 222-229

TEXT: The probabilities of the generation of showers of a given number of particles by primary protons, at sea level, are calculated by the Monte Carlo method. The assumptions are stated under which the calculations were carried out. The fixed number of collisions  $m$  between nucleons and atoms of air was considered, having a Poisson distribution with mean  $\bar{m} = 12.5$ . The integral distribution function of the logarithm of number of particles  $z = \lg_{10} N$  at the level of observation, was determined by the formula

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$$\Psi(> z/y) = \sum_{m=1}^{\infty} P_m \Psi^{(m)} \left( > \frac{z}{y} \right) \quad (5)$$

where  $P_m$  is the Poisson weight for the case of  $m$  collisions,  $\Psi$  is the distribution function of  $z$  for  $m$  collisions,  $y = \lg_{10}(E_0/10^{10} \text{ ev.})$ ,  $E_0$  being the energy of the primary proton. The number of showers sampled in 3 cases for proton energies of  $10^{13}$ ,  $10^{14}$  and  $10^{15}$  ev. equals 763, 685 and 719 showers respectively. The results of the computations are shown in a figure. As an approximating function, the polynomial of fourth degree

$$\Psi\left(> \frac{z}{y}\right) = a + b(z - y) + c(z - y)^2 + d(z - y)^3 + e(z - y)^4 \quad (6)$$

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Computing some air-shower ...

is taken. The differential distribution functions are shown in another figure. It was found that the effect of fluctuations decreases with increasing energy of primary protons. It was also noted that the most probable value of  $z$  increases faster than  $y$ . Further, the distribution function  $\phi(y/z)dy$  was constructed of energies of protons which generate (at the level of observation) showers with given  $z$  for  $z = 3.8; 4.4$  and  $4.8$ . The most probable values of  $y$  are  $3.52; 4.04$  and  $4.41$  respectively. The effect of fluctuations proved considerable, owing to the fact that, out of all the distributions of proton collisions, those are most effective which generate the comparatively largest number of particles at the level of observation. With regard to the number spectrum and primary-proton spectrum, Fig. 4 shows the number spectrum, line 1 representing the spectrum with allowance for fluctuations, and line 2 - without fluctuations. With fluctuations taken into account, the number of showers increases by a factor of 1.5 approximately, for same intensity of proton flow. Another figure shows the primary proton spectrum. A comparison of the calculated intensity of protons with experimental values (of G. Cocconi) showed that the

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D299/D305

calculated value was 4 times smaller than the experimental value. Further, the density distribution function for proton collisions was constructed. The results of the calculations can be extended to the case when the primary particle is a nucleus with atomic weight  $A$ . Further, it is shown how certain shower characteristics can be derived from others. In an appendix,  $\eta^{\pm,0}$ -mesons, generated as a result of the interaction between a proton and an air atom, are discussed, as well as their decay into photons and successive generations of mesons. There are 7 figures and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: K. Greisen. Prog. Cosmic Ray Physics, v. 3, 1956.

Card 4/5

DEDENKO, L.G., GORYUNOV, N.N., ZATSEPIN, G.T,

"Development of Air Showers and Nature of Primary  
Component at High Energies,"

report presented at the Intl. Conference on Cosmic Rays and  
Earth Storms, Kyoto, Japan, 4-15 Sept 1961.

S/056/61/040/002/036/047  
3102/3201

3.9000 (1041, 1109, 1559)

AUTHOR: Dedenko, L. G.

TITLE: Calculation of some characteristics of extensive  
atmospheric showers taking account of fluctuations

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki,  
v. 40, no. 2, 1961, 630-636

TEXT: The Monte Carlo method was applied to calculate with a "Strela" computer the production probabilities for showers of a given particle number at an altitude of  $640 \text{ g/cm}^2$ . The calculations were made for primary protons of several energies under the following premises:  
1) On a collision of a proton of a given energy with an atomic nucleus of the air, a constant portion  $\alpha$  of energy is conserved which is consumed for the pion production. A proton of the initial energy  $E_0$  has the energy  $E_j = \alpha^j E_0$  after  $j$  collisions. If the proton interaction range in the atmosphere is  $\lambda_0 = 80 \text{ g/cm}^2$ , the absorption range  $\Lambda = 120 \text{ g/cm}^2$ ,

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Calculation of some characteristics ...

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then  $\lambda_0/\lambda = 1 - \alpha^\gamma$ , where  $\gamma = 1.7$ . 2) On a collision of a proton or of a charged pion with a nucleus, the number of produced pions is given by  $n_\pi(E) = 1.26(E/10^{10})^{0.25}$ ; 1/3 of this amount is assumed to fall to  $\pi^0$  mesons. The energy of all secondary mesons is equal to  $E_\pi(E) = \eta E/n_\pi(E)$ , where  $\eta = 0.47$  for an incident proton, and  $\eta = 1$  for an incident meson. 3) The number of particles reaching the observation level  $X_0 = 8$  nuclear units in the shower, and originating from collisions at  $X_p$  between protons of energy  $E_j$  with atomic nuclei of the air, is given by

$$N_{j+1} = 0.47K(E_\pi(E_j), X_0, X_p) E_j E_\pi^{-1} N(E_\pi, X_0 - X_p). \quad (3) \quad (3),$$

where  $K(E_\pi(E_j), X_0, X_p)$  is a coefficient indicating the part of energy transferred to  $\pi^0$  mesons. Fig. 1 shows  $(E_\pi)$  for different  $X_p$  values.

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4) If the proton suffers  $m$  collisions before the observation level, the number of shower particles will be  $N = \sum_{j=1}^m N_j$ . A study is then made of the probability distribution of the particle number on the observation level at a fixed energy  $E_0$  (in eV) of the primary proton. The probability density in the case of  $m$  collisions is given by  $\Psi(z|y) = \sum_{m=1}^{\infty} P_m \Psi^{(m)}(z|y)$ , where  $z = \ln N$ ,  $N$  the particle number,  $P_m$  the probability of  $m$  collisions,  $y = \ln(E_0/10^{10})$ . This series has been found by a computer and ends with the term with  $m = 15$ . The resulting values of  $\Psi(z|x)$  are denoted by the circles in Fig. 2; the solid curve has been calculated by the approximation function  $\ln \Psi(z|y) = \sum_{i=1}^4 a_i (z-y)^i$ . As may be seen, the approximation fits fairly well, and with growing  $E_0$  the effect of

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fluctuations drops. The probability distribution of the energies of the primary protons, which produce showers with given particle number at the observation level, is given by  $q(y/z)dy = C^{-1} Y(z/y) Be^{-\gamma y} dy$ ; the normalization constant C determines the total number of showers with

given z:  $C = \int_{y_{\min}}^{\infty} Be^{-\gamma y} Y(z/y) dy$ . The function  $q(y/z)$ , i.e., the energy

spectrum of shower-producing protons for three N values is shown in Fig. 3. The table gives the ratios between the mean energies of He and O nuclei and the proton energies. The shower spectrum with respect to the particle number is shown for H, He, and O nuclei in Fig. 4 for the sea level and the Pamir plateau ( $640 \text{ g/cm}^2$ );  $C(z) = B\gamma^{-1} e^{-\gamma z}$ ,  $z = \ln \bar{N} = -1.28 + 1.43 y - 0.015 y^2$ . The spectrum of primary neutrons is shown in Fig. 5. If the constant  $\gamma$  is taken to be 1.8 (instead of 1.7), this will result in an increase of the shower number

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by about 10% (sea level) and 6% (Pamir), respectively, and also the altitude dependence of the showers is increased by 10%. Professor G. T. Zatsepin is thanked for assistance, Professor Ye. S. Kuznetsov for having supplied the computer, O. B. Moskaev for his advice. There are 5 figures, 1 table, and 9 Soviet-bloc references.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: September 3, 1960

N	Уровень моря ①			Уровень Памира ②		
	$6.3 \cdot 10^4$	$3.2 \cdot 10^4$	$2.5 \cdot 10^4$	$6.3 \cdot 10^4$	$3.2 \cdot 10^4$	$2.5 \cdot 10^4$
He <sup>4</sup>	2,3	2,2	2	1,5	1,4	1,3
O <sup>16</sup>	3,2	3	2,6	2	1,8	1,6

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Legend to the Table: 1) sea level; 2) Pamir plateau

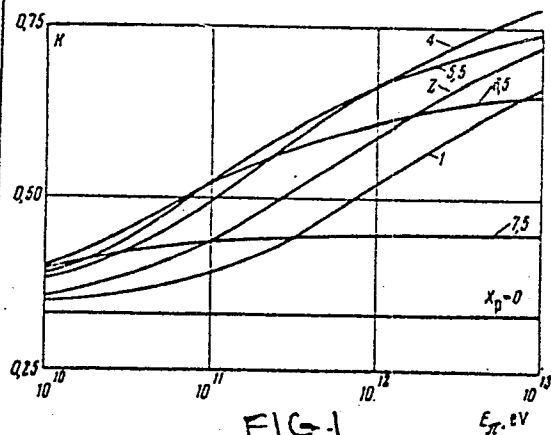
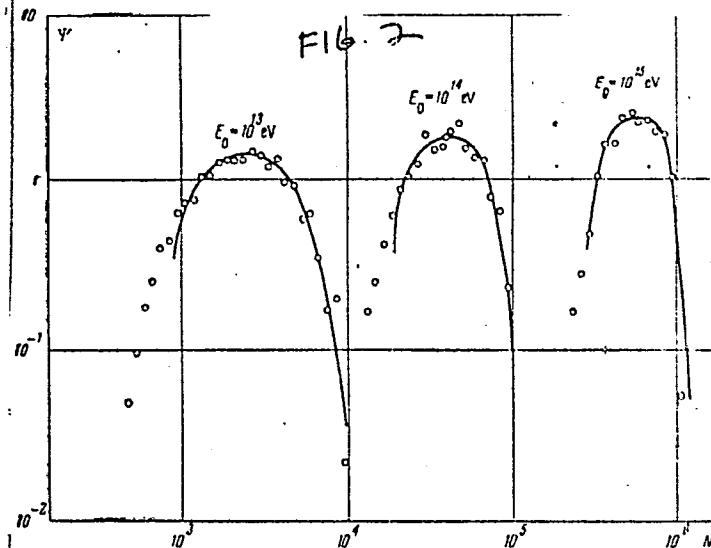


FIG-1

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Calculation of some characteristics ...

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